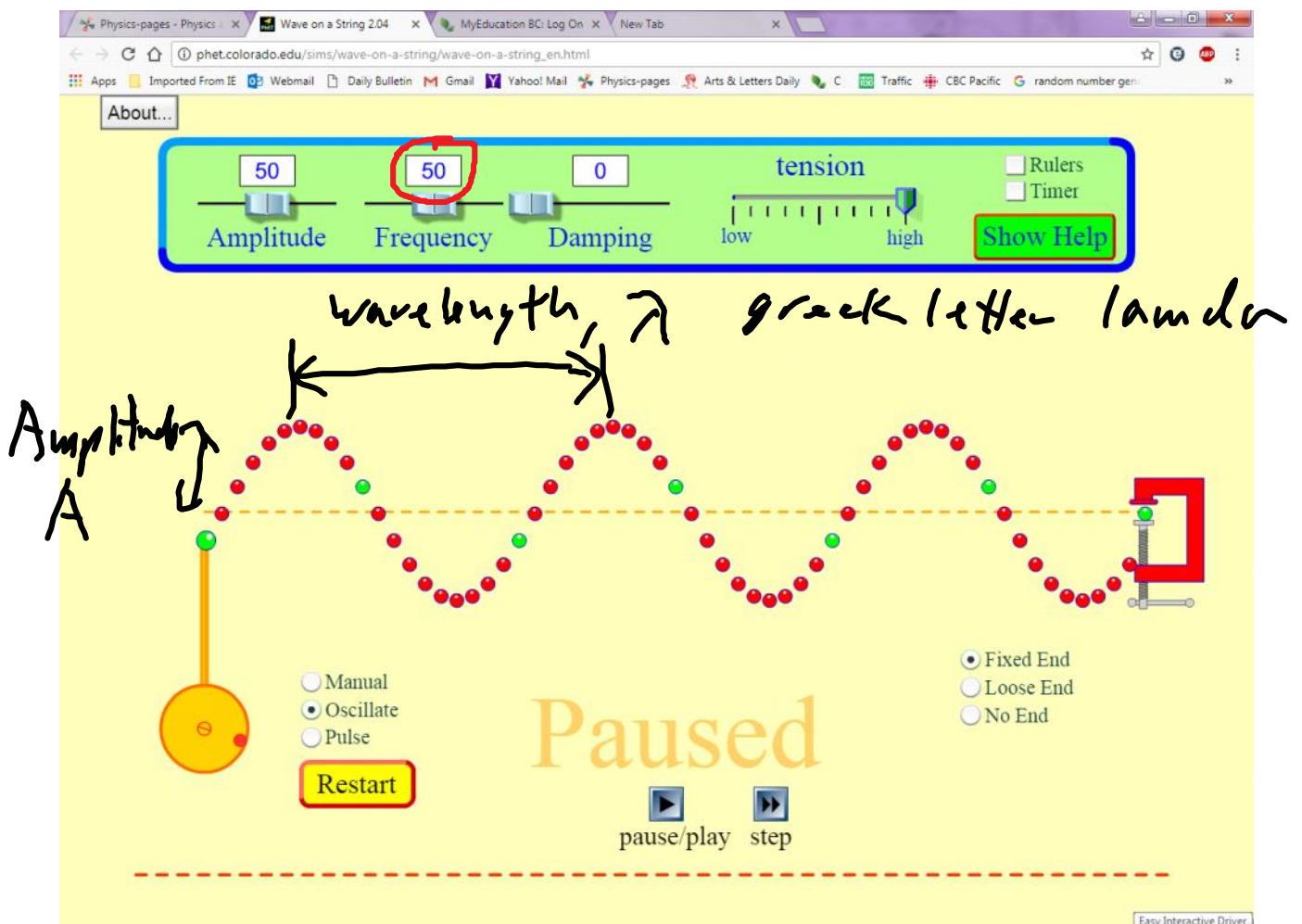
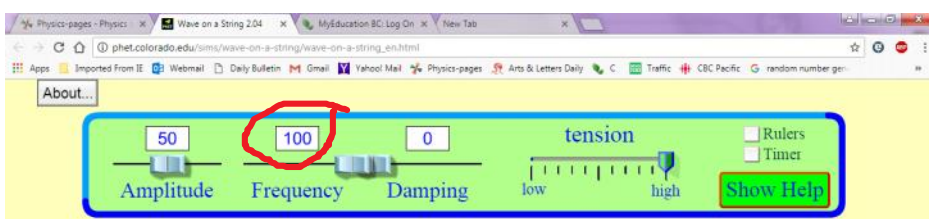


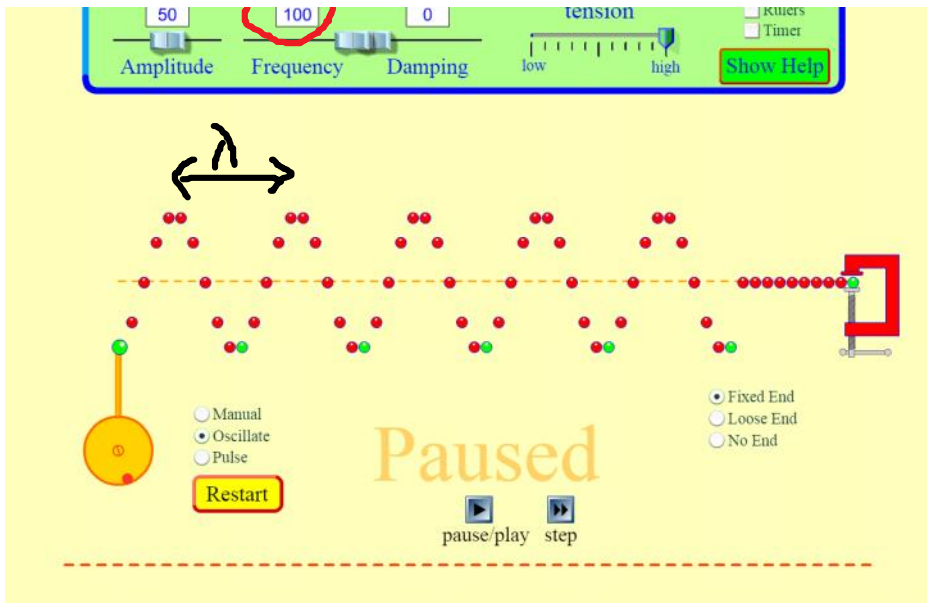
Waves

http://phet.colorado.edu/sims/wave-on-a-string/wave-on-a-string_en.html

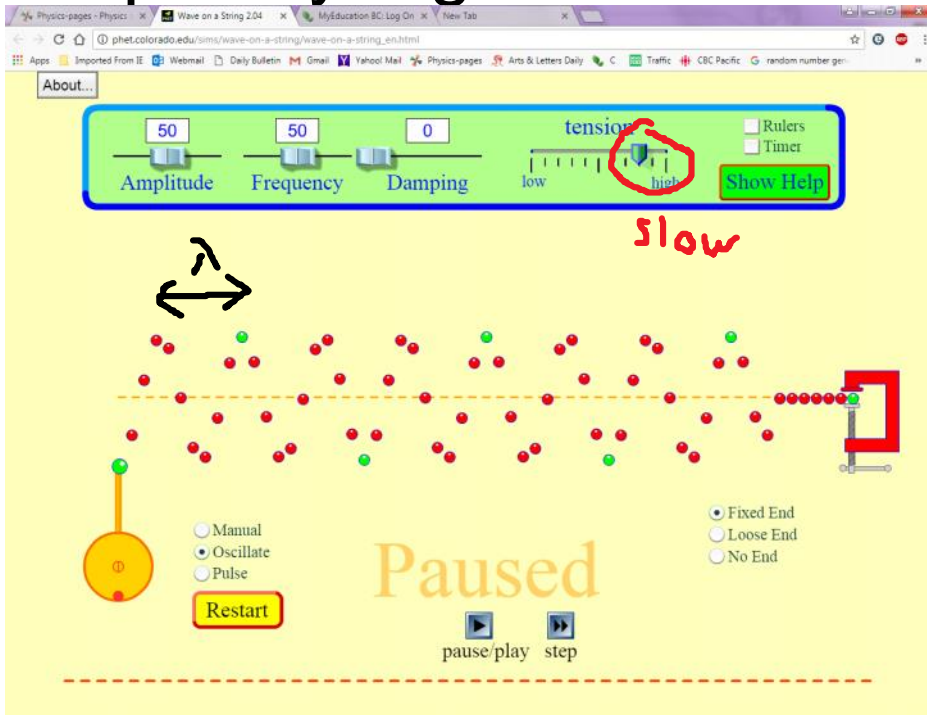


If you double the frequency, λ is halved





If you slow the wave but keep the frequency high



the wavelength is shorter.

$$v = \lambda f$$

v is the wave speed, in m/s

λ is the wavelength in m, distance between successive crests

f is the frequency, in Hz - number of waves produced per unit time.

the wavespeed is determined by the tension in the spring or more generally by the medium. (can be slight changes based on frequency but small) Not determined by amplitude!

p293 Q1-4 p294 CR 1.1-1.4

http://www.walter-fendt.de/html5/phen/standingwave_reflection_en.htm

Waves Intro:

Name _____ Block _____

Define “wave” and give 5 examples of waves:

Define and give an example/sketch

transverse wave

longitudinal wave

surface wave

wave pulse

travelling wave

Wave speed

Medium

Amplitude

Wavelength

Frequency

Period

reflection

refraction

diffraction

constructive interference

destructive interference node

standing wave

antinode/node

http://www.walter-fendt.de/html5/phen/standingwave_reflection_en.htm